

REMARKS

The above amendments to the above-captioned application along with the following remarks are being submitted as a full and complete response to the Office Action dated January 17, 2008 (U.S. Patent Office Paper No. 20080109). In view of the above amendments and the following remarks, the Examiner is respectfully requested to give due reconsideration to this application, to indicate the allowability of the claims, and to pass this case to issue.

Status of the Claims

As outlined above, claims 1-6, 8, 12 and 14-20 stand for consideration in this application, wherein claims 1-6, 8, 12, 15-17 and 19 are being amended to correct formal errors and to more particularly point out and distinctly claim the subject invention. All the amendments to the claims are supported throughout the disclosure of the invention, including page 13, line 12 to page 15, line 24. Applicants submit that no new matter is being introduced into this application through the submission of this response.

Prior Art Rejections

The Examiner rejected claims 12 and 14-18 under 35 U.S.C. §103(a) as being unpatentable over an article entitled "ProCashin/signature ..." in view of an article entitled "PIDSY Post Identification System" by Giesecke et al. Claims 1-6, 8 and 10 were also rejected but further in view of Jones et al. (US Publication No. 2003/0059098); and claim 19 further in view of Onishi et al. (US Publication No. 2002/0136457). Applicants have reviewed the above-outlined rejections and hereby respectfully traverse.

The present invention as recited in claim 1 is directed to an automatic teller machine (ATM) electronically connected to one or more devices, the one or more devices comprising: a deposit device configured to receive an initial bank note and a counterfeit bank note which is physically the same bank note after having been identified as a counterfeit bank note at an external station; an image extraction device having a sensor configured to extract one or more initial images from the initial bank note using the sensor and extract one or more second images from the counterfeit banknote using the same sensor; a transaction log device configured to attach a transaction log to the to the one or more initial images; a comparison device configured to compare the one or more initial images of the initial bank note to the one or more second images of the counterfeit bank note in order to obtain a comparison

result; and a retrieval device for tracing the counterfeit bank note, which is configured to retrieve the transaction log attached to the initial bank note, if comparison device determines that the one or more initial images of the initial bank note and the one or more second images of the counterfeit bank note are within the range of similarity.

As recited in claim 4, the present invention is directed to an automatic teller machine (ATM) electronically connected to one or more devices, the one or more devices comprising: a deposit device configured to receive an initial bank note and a counterfeit bank note which is physically the same bank note after having been identified as a counterfeit bank note at an external station; an image extraction device having a sensor configured to extract one or more initial images from the initial bank note using the sensor and extract one or more second images from the counterfeit banknote using the same sensor; a transaction log device configured to attach a transaction log to the to the one or more initial images; a comparison device configured to compare the one or more initial images of the initial bank note to the one or more second images of the counterfeit bank note in order to obtain a comparison result; and a retrieval device for tracing the counterfeit bank note, which is configured to retrieve the transaction log attached to the initial bank note, if comparison device determines that the one or more initial images of the initial bank note and the one or more second images of the counterfeit bank note are within the range of similarity. The image extraction device is further configured to: extract a front side initial image of the initial bank note in a first initial position; extract a front side initial image of the initial bank note in a second initial position; extract a back side initial image of the initial bank note in a first initial position; and extract a back side initial image of the initial bank note in a second initial position.

The present invention as recited in claim 12 is directed to a method of tracing bank notes, comprising the steps of: receiving a deposit of an initial bank note; extracting one or more initial images from the initial bank note using a sensor; attaching an initial transaction log to the one or more initial images; receiving one or more second images of a counterfeit bank note using the same sensor, which is physically the same bank note after having been identified as counterfeit bank note; comparing the one or more initial images of the initial bank note to the one or more second images of the counterfeit bank note in order to obtain a comparison result; and retrieving the initial transaction log based on the comparison result, if the comparison result indicates that the one or more images of the initial bank note and the one or more second images of the counterfeit bank note are within a range of similarity.

Among the features of the present invention, the same sensor is used to extract both the initial images from the initial bank note and the second images from the counterfeit bank

note. Applicants have found that if a sensor A is used to extract the initial images of a bank note X, and then the same sensor A is used to extract the second images of bank note X, the degree of coincidence between the two images can be made high. On the other hand, If the sensor A is used to extract the initial images of bank note X, and then another sensor B is used to extract the second images of bank note X, the degree of coincidence between the two images is comparatively low. Even when the characteristics differ little between sensors, if the image of the same bank note is extracted using different sensors, the extracted images are nevertheless delicately different. Applicants have found that this is what often results in differences between the image H of a bank note X from sensor A and the image I of the same bank note X from sensor B. A very high degree of accuracy is required in this field of the image extraction of bank notes. Even when the same sensor extracts images of the same bank note two or more times, two or more extraction results are not necessarily completely the same. Extraction results differ each time. Therefore, another feature of the present invention is the structure or step of comparing the one or more initial images of the initial bank note to the one or more second images of the counterfeit bank note in order to obtain a comparison result that then determines further operation based on the comparison being "within the range of similarity", namely the structure or step for retrieving the transaction log attached to the initial bank note, if comparison device determines that the one or more initial images of the initial bank note and the one or more second images of the counterfeit bank note are within the range of similarity in order to trace the counterfeit bank note.

In contrast to the present invention, the cited reference of "ProCashin" fails to disclose, teach or suggest any structure or operation that combines elements of receiving a deposit of an initial bank note; extracting one or more initial images from the initial bank note using a sensor; attaching an initial transaction log to the one or more initial images; receiving one or more second images of a counterfeit bank note using the same sensor, which is physically the same bank note after having been identified as counterfeit bank note; comparing the one or more initial images of the initial bank note to the one or more second images of the counterfeit bank note in order to obtain a comparison result; and retrieving the initial transaction log based on the comparison result, if the comparison result indicates that the one or more images of the initial bank note and the one or more second images of the counterfeit bank note are within a range of similarity.

Rather, "ProCashin" merely discloses a conventional system for the operation of ATMs and the bill backtracing of currency deposited through those ATMs. Bills deposited through an ATM can be detected as being counterfeit, but none of those parameters (see page

3/39) include any structure or operation that includes at least extracting one or more initial images from the initial bank note using a sensor; attaching an initial transaction log to the one or more initial images; receiving one or more second images of a counterfeit bank note using the same sensor, which is physically the same bank note after having been identified as counterfeit bank note; comparing the one or more initial images of the initial bank note to the one or more second images of the counterfeit bank note in order to obtain a comparison result; and retrieving the initial transaction log based on the comparison result, if the comparison result indicates that the one or more images of the initial bank note and the one or more second images of the counterfeit bank note are within a range of similarity.

The Examiner cited the article of Giesecke et al. as showing the feature of "within the range of similarity." However, Applicants will contend that this reference fails to provide such a teaching or suggestion. Instead, this reference only generally discusses the removal of counterfeit bills from circulation by their detection and tracing to a particular ATM and depositor. Giesecke et al. fails to provide any disclosure, teaching or suggestion that makes up for the deficiencies in ProCashin such that their combination could show every feature of the present invention as now claimed. Even if these two references were combined, they would still fall short of showing or suggesting any structure or operation embodying at least the combination of receiving a deposit of an initial bank note; extracting one or more initial images from the initial bank note using a sensor; attaching an initial transaction log to the one or more initial images; receiving one or more second images of a counterfeit bank note using the same sensor, which is physically the same bank note after having been identified as counterfeit bank note; comparing the one or more initial images of the initial bank note to the one or more second images of the counterfeit bank note in order to obtain a comparison result; and retrieving the initial transaction log based on the comparison result, if the comparison result indicates that the one or more images of the initial bank note and the one or more second images of the counterfeit bank note are within a range of similarity.

With respect to the reference of Jones '098, this reference only discloses a conventional system for tracking currency bills comprising a currency scanning device is provided. The scanning device includes a sensor that retrieves currency identification characteristic information of each bill processed. The currency identification characteristic information permits the unique identification of each bill processed. The system further comprises a customer identification means and means for associating each processed bill with the customer depositing the bill. Means for identifying the customer (or customer account)

associated with a particular processed bill after the deposit transaction has been completed is also included in the system (see for example Paragraph [0010]).

Jones '098 does not disclose, teach or suggest any structure of operation that combines at least the elements of receiving a deposit of an initial bank note; extracting one or more initial images from the initial bank note using a sensor; attaching an initial transaction log to the one or more initial images; receiving one or more second images of a counterfeit bank note using the same sensor, which is physically the same bank note after having been identified as counterfeit bank note; comparing the one or more initial images of the initial bank note to the one or more second images of the counterfeit bank note in order to obtain a comparison result; and retrieving the initial transaction log based on the comparison result, if the comparison result indicates that the one or more images of the initial bank note and the one or more second images of the counterfeit bank note are within a range of similarity, as in the present invention.

Thus, in view of all the above, Applicants will strongly but respectfully contend that none of the cited references discussed above discloses, teaches or suggests each and every feature of the present invention as claimed. Rather, the present invention is distinguishable and thereby allowable over at least the references of ProCashin, Giesecke et al., and Jones '098.

Onishi '457 was only cited for showing the features in a dependent claim. This secondary reference fails to provide any disclosure, teaching or suggestion to make up for the deficiencies in Jones '098. Even if they were combined, these references would still lack the combination of elements that make up the present invention as claimed, all as discussed hereinabove. Consequently, the present invention is distinguishable and thereby allowable over the prior art of record.

Conclusion

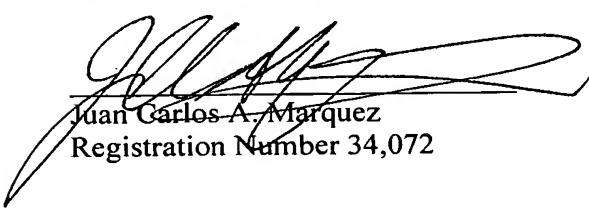
In view of all the above, Applicant respectfully submits that certain clear and distinct differences as discussed exist between the present invention as now claimed and the prior art references upon which the rejections in the Office Action rely. These differences are more than sufficient that the present invention as now claimed would not have been anticipated nor rendered obvious given the prior art. Rather, the present invention as a whole is distinguishable, and thereby allowable over the prior art.

Favorable reconsideration of this application as amended is respectfully solicited. Should there be any outstanding issues requiring discussion that would further the prosecution and allowance of the above-captioned application, the Examiner is invited to

contact the Applicant's undersigned representative at the address and phone number indicated below.

Respectfully submitted,

Stanley P. Fisher
Registration Number 24,344



Juan Carlos A. Marquez
Registration Number 34,072

REED SMITH LLP
3110 Fairview Park Drive
Suite 1400
Falls Church, Virginia 22042
(703) 641-4200

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